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Impact of Sports Recreation Programs to Develop Basketball Skills Among Preparatory Students

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ABSTRACT
This study aims to identify impact of a proposed recreational sports program on developing some basic basketball skills among preparatory students. The researcher used an experimental design with a single group and pre- and post-tests, as it was suitable for nature and objectives of study. Sample was selected purposively from preparatory school students, with main sample consisting of 16 students, in addition to a pilot sample of 12 students from study community outside main sample. The researcher used a set of skill tests to measure basic basketball skills, which included: zigzag dribbling test between cones, 30-second wall pass test, accurate pass to a specific target test, stationary shooting test, and ladder shot test, also prepared a proposed recreational sports program that lasted for 8 weeks, with 3 sessions per week, each session lasting 60 minutes, program included a set of games, competitions, and recreational activities related to basic basketball skills. Results showed statistically significant differences between pre- and post-tests for experimental group in all tests, skills under investigation are in favor of post-test, values are greater than tabulated (t) value at a significance level of 0.05, which indicates effectiveness of recreational sports program in improving skill performance level of students. It was recommended that use of recreational sports programs be expanded within physical education lessons because of their effective role in improving learning of sports skills and increasing students' motivation to participate in sports activities.

Keywords: Sports Recreation; Basketball; Preparatory Students.

ABSTRAK
Studi ini bertujuan mengidentifikasi dampak program olahraga rekreasi yang diusulkan terhadap pengembangan keterampilan dasar bola basket di antara siswa persiapan. Peneliti menggunakan desain eksperimental dengan satu kelompok dan uji pra- dan pasca, sesuai dengan sifat dan tujuan studi. Sampel dipilih secara sengaja dari siswa sekolah persiapan, dengan sampel utama terdiri dari 16 siswa, selain sampel percontohan sebanyak 12 siswa dari komunitas studi di luar sampel utama. Peneliti menggunakan serangkaian tes keterampilan untuk mengukur keterampilan dasar bola

basket, yang meliputi: tes dribbling zigzag di antara kerucut, tes pass dinding 30 detik, tes passing akurat ke target tertentu, tes menembak diam, dan tes tembakan tangga, juga menyiapkan program olahraga rekreasi yang diusulkan selama 8 minggu, dengan 3 sesi per minggu, Setiap sesi berdurasi 60 menit, program mencakup serangkaian permainan, kompetisi, dan aktivitas rekreasi yang berkaitan dengan keterampilan dasar bola basket. Hasil menunjukkan perbedaan signifikan secara statistik antara pra- dan pasca-tes untuk kelompok eksperimen dalam semua tes, keterampilan yang sedang diselidiki lebih mendukung pasca-tes, nilai lebih besar dari nilai tabulasi (t) pada tingkat signifikansi 0,05, yang menunjukkan efektivitas program olahraga rekreasi dalam meningkatkan tingkat kinerja keterampilan siswa. Disarankan agar penggunaan program olahraga rekreasi diperluas dalam pelajaran pendidikan jasmani karena perannya yang efektif dalam meningkatkan pembelajaran keterampilan olahraga dan meningkatkan motivasi siswa untuk berpartisipasi dalam aktivitas olahraga.

Kata Kunci: Sports Recreation; Basketball; Preparatory Students.

INTRODUCTION

Modern world is witnessing rapid development in fields of education and sports activities. Educational institutions are now required to provide comprehensive educational programs aimed at developing learner's personality in all aspects physical, psychological, social, and intellectual (Fatoni et al., 2025; Ysmailova et al., 2024). Physical education is considered a fundamental pillar of educational process due to its effective role in preparing individuals capable of positive interaction with society. It con tributes to acquiring motor skills, developing physical abilities, and instilling positive values and attitudes in students, from this perspective, importance of recreational sports activities has emerged as a modern educational tool that helps achieve goals of physical education in a more engaging and attractive way for learners (Al Ahmed, 2024; Orozco et al., 2018).

Tahani Abdel Salam (2001) states that sports recreation is an important field that has received increasing attention in recent decades due to its vital role in utilizing leisure time positively and its contribution to improving physical, psychological, and social health of individuals. Sports recreation is not limited to simply practicing physical activities for purpose of entertainment, but extends to include organized programs and activities that aim to develop various abilities and skills within a framework of enjoyment and psychological satisfaction (Stodolska et al., 2014; Wilén et al., 2025). Recreation also helps to alleviate psychological stress and increase motivation towards participating in various sports activities, which is reflected positively on learning process and acquisition of motor skills. (Abdel Salam, 2001: 14)

Russell (2008) explained that recreational programs represent an effective approach to developing educational process within schools, as they provide students with diverse opportunities for practice, experimentation, and discovery in a fun and engaging environment. These programs help raise motivation to learn, improve social relationships among students, and develop self-confidence, in addition to their role in improving skill performance in various sports activities, sports recreation programs have become an essential part of modern educational system, which seeks to achieve holistic development of learners. (Russell , 2008: 36)

Abdel Hamid Sharaf (2019) stated that preparatory stage is one of the most important educational stages a student goes through, as it is characterized by occurrence of many physical, physiological, psychological, and social changes associated with early adolescence. This stage requires providing educational and sports activities that are appropriate to characteristics of growth and meet needs and inclinations of students, thus contributing to directing their energies in a positive way. Educational literature indicates that practicing recreational sports activities during this stage contributes to developing basic motor skills and enhancing psychological and social adjustment of students. (Sharaf, 2019: 45)

Basketball is one of the most widespread team sports in educational institutions, due to its diversity of motor skills, speed of performance, and numerous competitive situations that contribute to development of students' physical, mental, and social abilities, game also requires mastery of a set of basic skills that represent the foundation for successful performance, the most important of which are dribbling, passing, and shooting skills, as these skills are closely linked to level of achievement and performance during matches. Wissel , 2011: 59)

Learning basic basketball skills is a primary objective of school physical education curricula, as mastering these skills forms foundation upon which tactical and technical performance is built in advanced stages of learning and practice. Recent studies indicate that using teaching methods based on active participation and recreational games significantly improves speed of motor learning and increases skill retention compared to traditional methods that rely on rote memorization and stereotypical repetition of skills. (Magil , 2010: 74)

Recreational sports programs provide an engaging learning environment that helps students practice sports skills spontaneously in fun and challenging situations. This leads to increased actual practice and improved skill performance. Specialists in motor learning emphasize that increasing number of successful attempts within exciting learning situations is one of the most important factors affecting speed of acquiring and mastering sports skills. This makes recreational programs an effective tool in teaching team sports skills in general and basketball in particular. (Schmidt, 2025: 32)

School sports activities are one of the most important educational means that contribute to integrated development of students in terms of physical, skill, psychological and social aspects. They also represent appropriate environment for discovering sports inclinations and developing talents among students at different educational stages. Basketball occupies a distinguished position among school sports activities due to its enjoyable, dynamic nature that depends on cooperation, teamwork and quick decision-making, as well as its role in developing many physical, skill and mental abilities among practitioners, great importance of basketball within physical education programs, practical reality indicates a clear disparity in level of students' performance of basic skills of game.

A weakness in level of mastery in some key skills such as dribbling, passing and shooting is observed, which represent basis upon which technical and tactical performance of game is built. A decrease in level of enthusiasm and active participation among some students during physical education classes is also observed, which may negatively affect learning process and acquisition of sports skills correctly.

This is because many traditional educational programs rely heavily on direct teaching methods and stereotypical repetition of skills, which may lead to students feeling bored and losing motivation to participate, especially in preparatory stage, which is characterized by continuous need for renewal, variety, movement and interaction, nature of this age stage requires use of more exciting and stimulating teaching methods that attract students' attention and motivate them to learn and practice continuously.

Via monitoring of physical education lessons in preparatory stage noticed that many students do not achieve expected level in performing basic basketball skills, despite availability of suitable facilities and playgrounds in some schools. It also became clear that a large percentage of students tend to participate in activities that are more fun and challenging than activities that rely on traditional performance of skills, which indicates importance of searching for modern educational approaches that combine learning and fun at same time.

Sports recreation is one of modern educational methods that employs activities, games, and physical competitions within a framework of fun and excitement, which helps to raise level of motivation to participate and increases the students' desire to learn and practice. Sports recreation also provides greater opportunities for interaction and positive competition among students, and creates a more attractive educational environment that helps to indirectly improve level of skill performance through repeated practice within fun and exciting situations, need arose to study role of sports recreation programs in developing basketball skills among middle school students, and to identify effectiveness of these programs in improving level of performance of basic skills of game compared to usual levels among students, in light of importance of developing methods of teaching physical education and searching for modern strategies that contribute to raising efficiency of educational process and achieving desired educational goals.

This study aims to identify impact of sports recreation programs on developing basketball skills among middle school students. Designing an entertainment program athlete can be used to develop basketball skills teaching within middle schools. Identifying impact of recreational sports program on basic basketball skills of preparatory students.

Research hypothesis there are statistically significant differences between pre- and post-test measurements of experimental sample in basic basketball skills of preparatory students, in favor of post-test measurement.

METHODS

The researcher used experimental method as it was suitable for nature of study, and employed an experimental design using pre- and post-testing, community of study includes preparatory students. The researcher selected a random sample of preparatory students who were scheduled to play basketball, numbering 28 students, divided into 12 students for pilot study standardizing tests in terms of validity and reliability, and 16 students for experimental group, as shown in Table (1).

Table 1. Numerical distribution of sample

Classification	Research sample	Exploratory study sample		Experimental group	
		Number	Ratio	Number	Ratio

Preparatory students	28	12	42.86%	16	57.14%

Statistical description of sample

Table 2. Statistical implications of basic factors of sample

Variables	Measurement unit	Mean	Standard deviation	Skewness coefficient	Squamous coefficient
Age	Year	14.25	0.17	0.74	1.02
Height	cm.	158.47	1.63	0.48-	0.51
Mass	Kg.	60.96	2.03	1.36	1.71

Table (2) shows homogeneity of sample data in basic primary measurements, as values of skewness coefficient range between (0.48- to 1.36), and this value is close to zero, squaring coefficient also reached between (0.51 to 1.71), and this means that fluctuation of normal curve is considered acceptable and in average and is not fluctuating up or down, which confirms similarity of sample members in primary measurements.

Data collection methods and tools

The researcher used a set of devices and tools necessary to implement sports recreation program and conduct research measurements and tests, as follows :

First: Devices used: Restameter is a device for measuring the total length of body in centimeters. A calibrated medical scale for measuring body weight in kilograms. Digital stopwatches for measuring time in skill tests. A whistle to regulate work during program implementation and tests. A measuring tape graduated in meters to determine distances and dimensions for tests. A camera or mobile phone to record some performance stages when needed.

Second: Tools used: Legal basketballs suitable for the age group. A regulation basketball court or a fitted half-court, cones to determine paths of movement. Training markers to identify performance positions during tests, hoops various sizes available for use in recreational games. Sports ropes of various lengths. Colorful balls and other recreational tools. Targets or marks drawn on wall for passing tests. A legal basketball hoop equipped with a scoring board. Chalk or adhesive tape to mark performance areas and lines.

Measurements and tests

The researcher referred to previous studies and scientific references that dealt with study variables and sought opinion of experts on them. Then the researcher arrived at following tests, which are shown in Table (3).

Table 3. Skills tests

Skills tests	Measurement unit
Zigzag among cones	Second
Wall roll test in 30 seconds	Number
Accuracy of passing towards a specific target	Degree
Shooting from a stationary position	Degree
Lay-up shooting test	Number

Pilot study

Pilot study was conducted on 10/17/2025 on a sample of 12 students outside main sample, in order to measure validity and reliability.

Scientific procedures for skills tests

Validity: To find validity coefficient for tests under investigation, the researcher used validity of peripheral comparison. By calculating mean value of differences between the highest and lowest quartiles of results of pilot sample of 12 students, Table (4) illustrates this.

Table 4. Significance of differences between the upper and lower quartiles in determining validity of differentiation

Tests	Measurement unit	Upper quarters		Lower quarters		Calculated (t) value	Sig. level
		M.	St.d	M.	St.d		
Zigzag among cones	Second	14.32	0.51	20.87	0.94	9.84	0.00
Wall roll test in 30 seconds	Number	18.67	1.15	11.33	1.53	8.31	0.00
Accuracy of passing towards a specific target	Degree	9.00	0.82	5.33	1.21	6.47	0.00
Shooting from a stationary position	Degree	7.67	0.58	3.67	0.82	8.92	0.00
Lay-up shooting test	Number	8.00	1.00	4.67	0.58	7.63	0.00

Value of (t) at a significance level of (0.05) = 2.182

Previous table showed significant differences between the upper and lower quartiles in tests under investigation, where value of (t) ranged between (6.47: 9.84), which is higher than tabulated value of (t), indicating validity of tests under investigation.

Reliability: reliability coefficient for tests was found by using application and reapplication method on same sample of pilot study 12 students, where tests were re-administered after (7) days from first application to find correlation coefficient between first and second application, as shown in Table (5).

Table 5. Reliability coefficient is determined by finding correlation coefficient between initial application and reapplication

Tests	Measurement unit	First application		Second application		value (R)
		M.	St.d	M.	St.d	
Zigzag among cones	Second	17.42	1.74	17.21	1.69	0.947*
Wall roll test in 30 seconds	Number	15.08	2.15	15.33	2.07	0.932*
Accuracy of passing towards a specific target	Degree	7.17	1.40	7.33	1.37	0.918*
Shooting from a stationary position	Degree	4.58	1.08	4.75	1.03	0.941*
Lay-up shooting test	Number	5.58	1.24	5.75	1.14	0.926*

Tabular value of (r) at a significance level of (0.05) = 0.553

Table (5) shows that there is a statistically significant correlation between first application and reapplication in skill tests, where calculated value of (r) ranged between (0.918: 0.947), which is greater than tabular value of (r) at a significance level of 0.05, which indicates reliability of tests under investigation.

Recreational program

Overall goal of program: proposed recreational sports program aims to develop some basic basketball skills among preparatory students through a range of exciting and engaging recreational activities and games that are appropriate for their age group.

Program Sub-Objectives: program aims to developing skill of zigzag in basketball. Developing passing skills and passing accuracy. Developing skill of shooting from a stationary position. Developing skill of peaceful aiming. Increasing students' motivation to play basketball. Developing a spirit of cooperation and fair competition among students. To instill positive attitudes in students towards sports activity.

Program building principles: program's content is suitable for age group (12–15 years), progression from easy to difficult. Taking into account individual differences between students. Providing security and safety measures. Diversifying between individual and group recreational activities. To create an element of suspense and excitement, relationship between recreational activities and basketball skills is subject of this research.

Program duration and application time: Program duration: 8 weeks. Number of units per week: 3 units. Total units: 24 training units. Training session duration : 60 minutes.

Table 6. Time distribution for the training unit

Unit parts	Time
Administrative tasks and warm-up	10 minutes
Physical preparation	10 minutes
Main section (recreational and skill games)	35 minutes
Final part	5 minutes

Program content

Week 1,2: Developing conversational skills. A zigzag race between cones. Ball Hunter game. Zigzag within hoops. Relay races using zigzag. Zigzag with a change of direction.

Weeks 3,4: Developing passing skills. Passing ball inside circles. Passing ball between groups, game is about the fastest passing team. Passing ball towards predetermined goals. A race of consecutive passes.

Weeks 5,6: Developing skill of shooting from a stationary position. Aiming at multiple targets. Competitive shooting between teams. A game of collecting points. Shooting from different distances. Individual and team shooting competitions.

Weeks 7,8: Developing skill of lay-up aiming. Lay-up shooting competitions. Zigzag followed by lay-up correction. Group peaceful shooting competitions. Simplified attack games. Mini-matches to practice skills.

Basic study

Main study was conducted from 26/10/2025 to 29/12/2025, and the researcher will explain this as follows:

Pre-measurement: Pre- measurement were conducted on 26/10/2025 for variables under study on the research sample of 16 students.

Program application: The researcher applied proposed program to experimental research group, which consisted of 16 students, during period from 10/28/2025 to 12/27/2025, at a rate of three units per week for a period of two months.

Post-measurement: Post-measurements of variables under study were conducted on sample on December 29 , 2025, after 8 weeks of implementing training program.

Statistical methods

The researcher used following statistical method to process the data using statistical software (SPSS 23) to find mean. Ottrium coefficient. Standard deviation. T-test. Skewness coefficient. Pearson correlation coefficient.

RESEARCH RESULTS

Presentation and discussion of research hypothesis: There are statistically significant differences between the two measurements (pre- and post-) of experimental research sample in basic basketball skills of preparatory students, in favor of post-measurement.

Table 7. Significance of differences between pre-test and post-test scores for experimental group in basic basketball skills for preparatory students

n = 16

Tests	Measurement unit	Pre-measurement		Post-measurement		Calculated (t) value	Sig. level
		M.	St.d	M.	St.d		
Zigzag among cones	Second	18.75	1.86	15.42	1.35	8.64	0.00
Wall roll test in 30 seconds	Number	14.38	2.22	20.56	2.41	9.17	0.00
Accuracy of passing towards a specific target	Degree	6.81	1.47	10.94	1.61	7.93	0.00
Shooting from a stationary position	Degree	4.25	1.18	7.63	1.35	8.21	0.00
Lay-up shooting test	Number	5.31	1.40	8.75	1.53	8.06	0.00

Value of (t) at a significance level of (0.05) = 2.131

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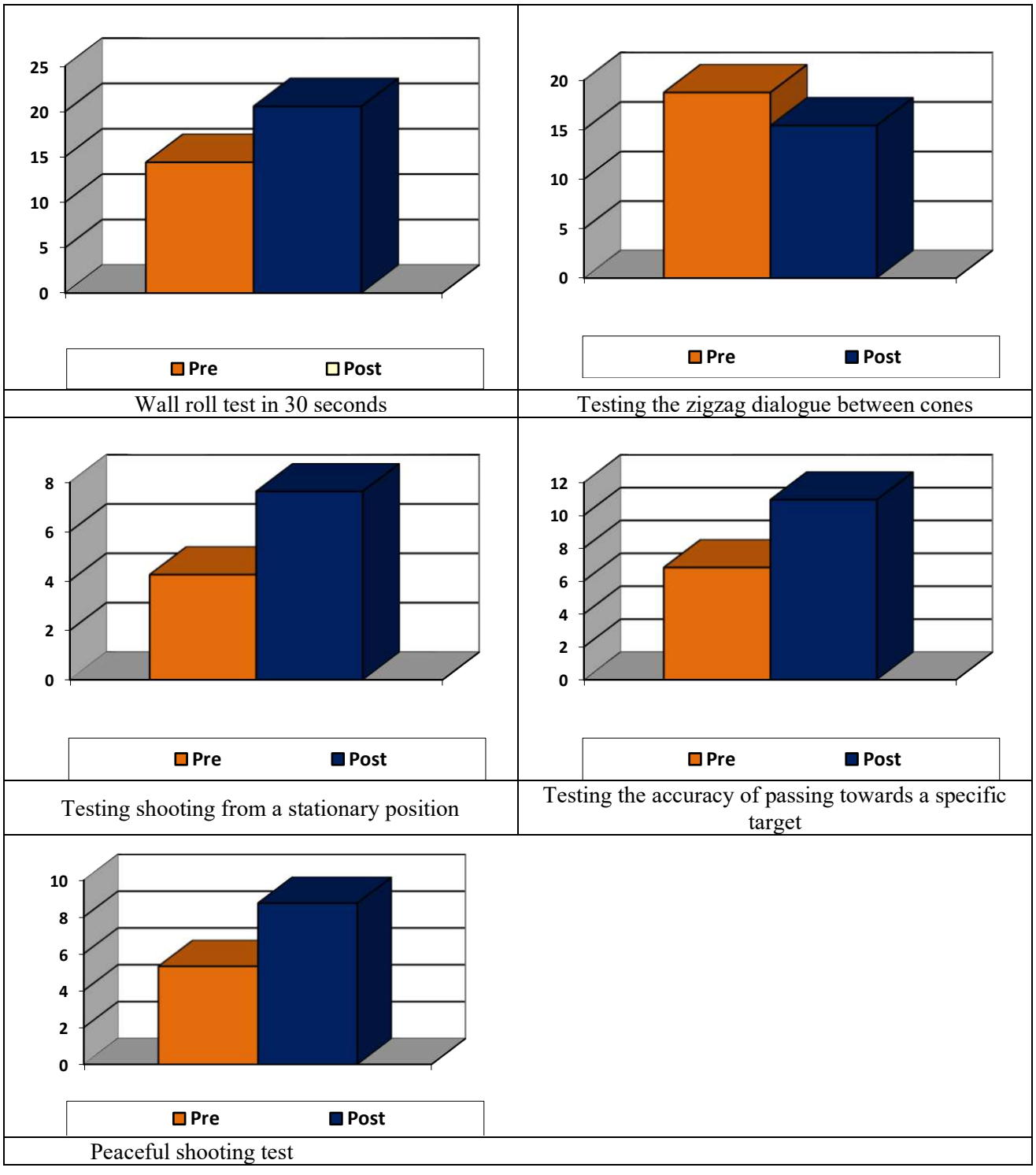

Figure 1. Mean of measurements (pre- and post-tests) for experimental group in basic basketball skills

Results of Table 7. and Figure 1. show that there are statistically significant differences between mean scores of pre-test and post-test for experimental group in favor of mean post-test in tests zigzag test between cones, 30-second wall pass test,

pass accuracy test towards a specific target, shooting test from a stationary position, and ladder shot test, where calculated value of "t" ranged between (7.93 : 9.17).

Also indicate that there are statistically significant differences between pre- and post-tests of experimental group in favor of post-test in zigzag test between cones, as average time decreased from (18.75) seconds to (15.42) seconds, which reflects a clear improvement in speed and accuracy of ball control. This can be explained by fact that recreational sports program provided students with frequent opportunities to practice in various motor situations based on play, fun, and competition, which helped improve eye-hand-foot coordination and develop the ability to change direction while keeping ball. In this regard, results of study by Moamen Ramadan Al-Azzazi et al. (2023) indicated effectiveness of proposed educational program in developing basketball skills, including dialogue, in favor of experimental group .

DISCUSSION

Results also showed a statistically significant improvement in 30-second wall pass test, with mean passing time increasing from 14.38 to 20.56 passes. This indicates an improvement in speed and accuracy of students' passes. This is attributed to fact that recreational activities often rely on group interaction and ball exchange among peers in miniature game situations, which increases number of actual passing attempts and makes student more capable of choosing appropriate timing and force for pass. This result is consistent with what was indicated in study. Calábria -Lopes et al. (2019), who used teaching games for understanding model in teaching skills of passing and shooting in basketball, confirmed effectiveness of play-based learning situations in improving skill performance of learners.

Results in Table 7. also show a clear improvement in passing accuracy test towards a specific target, where mean increased from (6.81) to (10.94), reflecting recreational program's ability to develop students' motor accuracy. This can be attributed to nature of he recreational games, which included specific targets, varying distances, and individual and group competitions. This helped students repeat performance in an engaging way without feeling bored. This result is consistent with findings of study. López -Pérez Others (2024), which confirmed that mini-games in basketball contribute to improving basic technical and tactical skills in children and adolescents, including passing, shooting and dribbling.

Regarding stationary shooting skills, results showed an increase in mean score from (4.25) in pre-test to (7.63) in post-test. This result confirms effectiveness of recreational program in improving shooting accuracy. This may be attributed to program's reliance on recreational exercises and games that included shooting at basket from different locations using simplified competitive methods. This helped students improve their focus, distance estimation, and coordination of force used during shooting. This result is consistent with a study Tannoubi and others (2023), Ben Smisha Al Eid (2020) explained that integrating video modeling into a basketball training program led to improved technical performance among children, confirming that diversifying educational stimuli and creating organized practice situations contributes to development of basketball skills.

Results also show statistically significant differences in ladder shooting test, where arithmetic mean increased from (5.31) to (8.75), which indicates an improvement

in students' ability to link dialogue, steps, and shooting in a complex motor performance. This result is logical in light of nature of recreational program, which provided gradual and simplified play situations that helped students integrate basic skills within situations close to actual performance in basketball. This result is consistent with study of Li et al. (2024), Mustafa Mahmoud Al-Jamsi (2017), which showed that mini-game programs are among effective methods in improving physical and skill aspects of young people, as a result of increased active participation and repetition of performance in realistic play situations.

The researcher believes that clear improvement in all skill tests under investigation is due to fact that recreational sports program did not rely on traditional repetition of skills only, but presented skills in form of diverse activities, games and competitions that suit characteristics of preparatory students, which contributed to increasing students' motivation towards active participation, raising the rate of actual practice, and developing motor coordination and self-confidence during performance.

CONCLUSIONS AND RECOMMENDATIONS

Proposed recreational sports program led to a statistically significant improvement in basic basketball skills of preparatory students, recreational sports program contributed to developing zigzag skills of sample, which was reflected positively on speed and accuracy of performance, recreational sports program contributed to improving performance level of passing skills and passing accuracy among middle school students, recreational sports program led to an improvement in performance level of skills of shooting from a stationary position and shooting smoothly among sample, recreational activities and games used in program contributed to increasing students' motivation to participate positively in learning basketball skills, recreational sports program has proven its effectiveness as one of modern educational methods suitable for developing basketball skills among preparatory students.

Implementing recreational sports programs in physical education lessons at preparatory stage, due to their positive impact on developing basic basketball skills. Utilize proposed recreational sports program when teaching and developing basketball skills among middle school students. Attention should be given to employing recreational games and competitions within physical education lessons to increase students' motivation towards learning and practice. Diversifying teaching methods used in teaching sports skills and moving away from traditional methods that rely on stereotypical repetition of performance. Providing necessary sports facilities and equipment to implement recreational programs within schools in a way that contributes to achieving their educational and pedagogical goals. Organizing courses and workshops for physical education teachers to train them on designing and implementing modern recreational sports programs. Encouraging students to participate continuously in recreational sports activities inside and outside school to develop their various athletic skills. Attention should be given to integrating recreational activities with educational sports programs to achieve a more exciting and effective learning environment for students. Adopt physical testing in sports academies. Develop scientific talent-identification programs for young players. Avoid relying on a single factor when determining a player's position. Conduct deeper studies that include psychological and technical aspects.

REFERENCES

Abdel Hamid Sharaf (2019). Programs in Physical Education: Between Theory and Practice. Cairo: The Book Center for Publishing .

Al Ahmed, M. I. A. (2024). The Role of Recreational Sport Activities in Improving the Quality of Life for University Students. International Journal of Human Movement and Sports Sciences, 12(1), 183–200. https://doi.org/10.13189/saj.2024.120120

Ben Smicha El Eid (2020): The effect of sports recreation using casual training on some functional variables in young basketball players during the transitional period, Al Tahaddi Journal, Volume 122, Issue No. 1, Larbi Ben M'hidi University, Oum El Bouaghi.

Calábria -Lopes, M., Greco, P. J., & Pérez-Morales, J. C. (2019). Teaching Games for Understanding in basketball camp : the impact on process and product performance . RICYDE. Revista Internacional de Ciencias del Deporte . doi : 10.5232/ ricyde , 15(56), 209-224 .

Fatoni, M., Syaukani, A. A., Indarto, P., Saputro, I. N., & Musyfiroh, I. H. (2025). Psychosocial predictors of academic achievement in physical education among Indonesian university students: Testing the mediating role of mental toughness. Physical Education and Sports: Studies and Research, 4(3), 291–301. https://doi.org/10.56003/pessr.v4i3.624

Li, T., Xu , Q., Sarmento , H., Zhao, Y., Silva, R.M., & Clemente, F.M. (2024). Effects of small-sided games training programs on physiological and physical adaptations of youth basketball players: A systematic review. Scottish Medical Journal. https://doi.org/10.1177/00368504241231657

López -Pérez, M., Rodríguez- Fernández , A., & González- Víllora , S. (2024). Small-sided games in teaching the technical and tactical skills of basketball in children and adolescents: A systematic review. Revista Ciencias de la Actividad Física UCM, 25(1), 1-17. https://doi.org/10.29035/rcaf.25.1.12

Magill, R., & Anderson, D. I. (2010). Motor learning and control (pp. 66-82). New York: McGraw-Hill Publishing.

Momen Ramadan Al-Azzazi, Mahmoud Muhammad Darwish Al-Rantisi, Ahmed Yousef Hamdan (2023) : The effectiveness of a proposed educational program for developing basketball skills among students of the Faculty of Physical Education and Sports at Al-Aqsa University in Gaza. Journal of Islamic University for Educational and Psychological Studies, 31(3), 75-94.

Mustafa Mahmoud Al-Jamsi (2017): Using a program for small games to teach some basic skills in handball to primary school students, unpublished research, Sadat City University.

Orozco, A. M., Arraiz Pérez, A., & Sierra, F. S. (2018). De la inherencia histórica del juego motriz al potencial educativo del deporte From the historical inheritance of motor game to the educational potential of the sport. Jugar Juego Deporte: Para Una Teoria Filosofica Deporte, 13, 175–182.

Russell, R. V., & Jamieson, L. M. (2008). Leisure program planning and delivery. Human Kinetics.

Schmidt, R. A., & Lee, T. D. (2025). Motor learning and performance: From principles to application. Human Kinetics.

Stodolska, M., Sharaievska, I., Tainsky, S., & Ryan, A. (2014). Minority Youth Participation in an Organized Sport Program. Journal of Leisure Research, 46(5), 612–634. https://doi.org/10.1080/00222216.2014.11950345

Tahani Abdel Salam (2001): Recreation and Recreational Education, Dar Al Fikr Al Arabi, Cairo.

Tannoubi , A., Quaranta , F., Pizzolato , F., & Scurati , R. (2023). Effectiveness of Video Modeling in Improving Technical Basketball Skills in Children. Children, 10(4), 687. https://doi.org/10.3390/children10040687

Wilén, C., Ahlqvist, V. H., Chen, C., Neovius, M., Magnusson, C., Henriksson, P., Dahlén, M., Sander, E., & Berglind, D. (2025). Socioeconomic disparities in organized sports participation and physical activity among a population based sample of preschool children: a cross-sectional study. BMC Pediatrics, 25(1). https://doi.org/10.1186/s12887-025-05651-3

Wissel , H. (2011). Basketball: Steps to success. Human Kinetics.

Ysmailova, R., Kalmatov, R., & Dzhumaeva, L. (2024). Socio-psychological aspects of adaptation of foreign students. BIO Web of Conferences, 120. https://doi.org/10.1051/bioconf/202412001041